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SUMMARY

of the

REPORT OF THE IN-DEPTH REVIEW OF THE NATIONAL COMMUNICATION

of

AUSTRIA

(The full text of the report (in English only) is contained in document FCCC/IDR.1/AUT)

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Also available on the World Wide Web (http://www.unfccc.de)

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Summary[1]

1. The in-depth review was carried out during the period November 1995 to November 1996, and included a country visit by the team from 3 to 7 December 1995. The team included experts from Ghana (paper review), the Netherlands and the International Energy Agency. Austria submitted its communication on 23 September 1994, and some supplementary information before the due date of 28 November 1994. Additional background material was made available to the team.

2. Austria is a federal state, and considerable responsibility for implementing policies and measures rests with the provinces (Lander), as well as the municipalities. Austria is bordered by eight countries, four of which have economies in transition, and this has some influence on national policies. The country has considerable transit traffic, and gasoline prices are higher than in its eastern neighbours and more or less equal to those in its western neighbours. Because of its climatic conditions, it has a considerable need for heating. In 1994 it utilized 26.4 per cent of renewables in the energy balance, evenly distributed between biomass and hydro. The level of carbon dioxide (CO_2) emissions per capita is low, averaging about 7.5 tonnes in 1990 compared to an average of 12 tonnes in countries of the Organisation for Economic Cooperation and Development (OECD). This is due to the high share of renewables as well as the relatively low energy consumption. The electricity sector is largely characterized by monopolies, with significant overcapacity and little recent use of existing coal-powered plants. Some liberalization of that sector is foreseen, which could change conditions for the introduction of policies and measures. Use of natural gas is expanding, and competes in some areas with biomass and in others with coal.

3. CO_2 accounted for 78 per cent of greenhouse gas (GHG) emissions in 1990 using the Intergovernmental Panel on Climate Change (IPCC) 1994 values for global warming potential (GWP), and the CO_2 emission level has been fluctuating within a range of 55 to 64 megatonnes since 1971, mainly due to weather conditions as well as changes in electricity production and in the transport sector. The main source sectors were energy and transformation (27.8 per cent), transport (27.3 per cent) and industry (24.3 per cent). Methane emissions represented around 20 and nitrous oxide only 2 per cent of the inventory, the latter being relatively low due to the limited use of fertilizers. Forest covers 46 per cent of the land, and figures provided to the team revealed a net annual sequestration equivalent to 15 megatonnes CO_2. Figures according to both IPCC and CORINAIR[2] were provided, and the team based its review primarily on documentation of the latter. Austria has two sets of

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1 In accordance with decision 2/CP.1 of the Conference of the Parties, the full draft of this report was communicated to the Austrian Government, which had no further comments.

2 CORINAIR is the component of the European Community's CORINE (Coordinated Information System on the State of Natural Resources and the Environment) dealing with air emissions inventories.

energy statistics that give considerably different figures for emissions, and the team considered the work being done to make these compatible as important. For the years 1994 and 1995 Austria succeeded in harmonizing these two statistical sets. The team noted that Austria has used a high emission factor for all oils, and that the inventory for CO_2 could be revised downwards. Revised emission factors have been laid down in the *Energy Report 1996* of the Austrian federal Government.

4. Austria has implemented, but to a varying degree, policies and measures to mitigate CO_2 emissions in all sectors. It also has some policies and measures that reduce emissions of other major GHGs and enhance sinks, although that is generally not their main motivation. The team noted in particular the taxation system for cars introduced in 1992 which encourages the purchase of energy efficient cars, although it is still uncertain whether this has been sufficient to establish a trend towards cars with less fuel consumption. Austria increased the relevant tax rate in May 1996. The team also noted that a considerable number of the measures described in the communication are either planned or are merely at the conceptual stage. In particular it noted that a combined carbon/energy tax has been discussed and was seen as potentially effective. Energy elements have been introduced into taxation; as a first step, an 18 to 150 per cent increase in mineral oil taxes depending on the fuel type was implemented in May 1995 and, as a second, natural gas and electricity became subject to taxes from 1 June 1996; for energy-intensive industries an upper limit regarding the tax burden (0.35 per cent of the net value added) has been introduced. Future development of policies and measures will also depend on the policies of the European Union, of which Austria became a member on 1 January 1995.

5. The team saw several scenarios showing possible development paths that could lead to achievement of the Toronto target of a reduction in CO_2 emissions of 20 per cent in 2005 from the 1988 level, as well as a stabilization of CO_2 emissions at 1990 level. A challenge would be to find policy instruments that would allow the technical and economical potentials identified in these studies to be realized. Even returning the CO_2 emissions to 1990 levels by the year 2000 would need a very high improvement rate in energy intensity (2.1 per cent annually with 2.5 to 3 per cent economic growth). This, however, was not seen as out of reach as long as the proposed measures are implemented sufficiently quickly. There are no estimates of whether and how long the present rate of net CO_2 removals could be maintained. Emissions of methane could be slightly reduced, while those of nitrous oxide could increase. The team assumed that emissions of hydrofluorocarbons (HFCs) would increase while those of perfluorocarbons (PFCs) would decrease, but none of them were mentioned in the communication.

6. Impact scenarios for Austria are carried out on the basis of information derived from the IPCC. The water system, is seen as vulnerable. The need to examine social and economic impacts further was recognized, a case in point being, the conditions for the important tourist industry, which could change significantly with a change in snow cover. No specific adaptation measures have been implemented but some projects are under way to investigate such measures. Austria provides important locations for monitoring climate-related variables

as well as atmospheric chemistry. Research and development have been concentrated on the process of climate change itself, although applied research has also been done. Austria has a relatively small expenditure on research and development on energy technologies, focusing on renewables and energy efficiency.

7. Austria provided one of the highest contributions on a per capita basis to the Global Environment Facility (GEF) in its pilot phase, and it is contributing its share to the replenishment. Official development assistance has been fluctuating between 0.30 and 0.34 per cent of GNP since 1991. Some efforts have been made to increase public awareness of climate change, but a major planned campaign reported in the communication had still not been implemented at the time of the team's visit. The involvement of social partners in policy formation enhances the understanding of issues related to climate change in important target groups.